# RECEIVED CENTRAL FAX CENTER

## JUL 17 2007

#### **REMARKS/ARGUMENTS**

#### Claim Amendments

Each of the independent claims 1, 24 and 38 have been amended. Amended claims 1 and 24 require that there be applied to a predefined area of an article or substrate, either a <u>spatial arrangement</u> of a group of marks collectively representing characteristics useful for identifying a specific person, or a <u>graphical constellation of marks</u> collectively representing a set of points of interest which are determinable from the constellation of marks and define characteristics useful for identifying a specific person. A likelihood of a match may be determined between the characteristics represented by that group or constellation of marks and characteristics identifying a person to be verified which are represented by a selected reference comprising a spatial arrangement of reference points. And, that likelihood of a match is determined by direct and/or indirect visual (or optical) comparison of the group or constellation of marks with the reference points, for verifying whether the person to be verified is the same person whose characteristics are represented by the group or constellation of marks.

Amended claim 38 defines a method of associating an article of manufacture with a person to be verified, the method comprising optically detecting a first graphical constellation of marks applied to a predefined area of the article, the first graphical constellation of marks corresponding to a set of points of interest defining characteristics useful for identifying a specific person and determinable from the first graphical constellation of marks; acquiring a biometric sample of the characteristics from the person to be verified and representing those characteristics acquired from the person to be verified by a second graphical constellation of marks; optically comparing the first graphical constellation of marks and/or set of points of interest with the second graphical constellation of marks to determine a likelihood of a match between the characteristics useful for identifying the specific person and the characteristics from the person to be verified; and, if such likelihood exceeds a predetermined threshold, associating the article with the person to be verified.

### Claim Rejections under 35 U.S.C. §103(a)

Under paragraph 2 at page 2 of said Office Action the Examiner rejected original claims 1-33 and 38-46 as allegedly being unpatentable over Berson (U.S. patent No. 5,469,506) in view of Eshera (U.S. patent No. 5,613,014). Under the same paragraph at page 11, the Examiner also rejected original claims 35-37 as allegedly being unpatentable over Berson in view of Eshera. Under paragraph 3 at page 12 of said Office Action the Examiner rejected original claim 47 as allegedly being unpatentable over Berson (U.S. patent No. 5,469,506) in view of Eshera (U.S. patent No. 5,613,014) and further in view of Tuceryan (U.S. patent No. 6,044,168). Finally, the Examiner indicated on page 2 of the Office Action that original claim 34 would be allowable if rewritten to include the limitations of all intervening claims therefor.

Applicant respectfully requests reconsideration and withdrawal of the claim rejections by the Examiner having regard to the present claim amendments and the following submissions.

From the Examiner's remarks concerning applicant's invention it is apparent that the Examiner has not understood applicant's invention and the claims have been amended to clarify the features of the invention. Unlike the cited references, the applicant's invention does <u>not</u> require or pertain to <u>any</u> analytical or computer processing means of comparing and matching markings with a reference. To the contrary, unlike the cited references, the applicant's invention provides verification means allowing association of a document to a verified person <u>by direct visual comparisons only – between different sets of graphical or spatially arranged markings, for which there need not be included any processing means at all; <u>and</u>, <u>at the same time</u>, the invention uses markings applied to a document (viz. graphical / spatially arranged markings) which are inherently meaningless to an observer but effective for such verification and security purposes. More specifically, for example, applicant's invention may apply to a predefined area of an article a graphical constellation of marks collectively representing a set of points of interest which together define identifying characteristics of a specific person, such as a fingerprint. Therefore, given</u>

the form of those markings viz. a graphical constellation corresponding to, say, the physical points of interest which define a particular fingerprint, they inherently have no particular meaning to a person viewing the document and simply appear as a random and unnoticeable set of dots (or similar) cast over an area of, for example, a document. A set of reference points is provided which define such identifying characteristics of a person to be verified in relation to that document viz. their fingerprint in this example. The person to be verified may be verified by means of only a direct visual (or optical) comparison between the graphical constellation of marks on the document (or points of interest, if not the same) and the reference points, so as to determine a likelihood of a match between the characteristics defined by each set of marks and points. Importantly, and unlike the prior art, including the references cited by the Examiner, because the foregoing characteristics information is applied to the document in the form of a graphical constellation, it allows other visual material to be applied to the document in the same area as the constellation of markings without hindering the visual acuity of that other material. As a result, advantageously the invention provides a distinct security feature for use on a document which does not interfere with (is visually integrated with) other security Indicia and material applied to the same area of the document.

By contrast, the cited reference to Bersen et al. discloses only the use of digital indicia for computer assisted processing (see column 1, lines 40-46, column 2, lines 15-20 and column 5, line 19) and teaches only a bar code for such digital indicia. Consequently, Bersen et al. could not possibly allow for, or contemplate, any direct visual comparison of markings as per applicant's invention. Nor does Bersen et al. in any manner contemplate or speak to applicant's applied feature which is, by its form, inherently unnoticeable to an observer (unobtrusive to the human eye). Similarly, the cited reference to Eshera et al. does not allow for, or contemplate any such direct visual comparison of markings but instead describes and teaches a computerized comparison of digitized fingerprint minutia maps (ARGs) of fingerprints of an unknown fingerprint set with corresponding (digitized) maps of reference fingerprint maps (see column 2, lines 65-66, column 6, lines 1-40 and Figs. 1a, 1b and 3a). No markings are applied to a document and the focus of Eshera et al. is computerized processing,

being digital and necessarily performed by a machine, <u>not</u> visual per the applicant's invention and performable by persons.

The foregoing advantages provided by applicant's invention are not, and cannot be, provided by the cited references. Clearly, the same is true of the final reference to Tuceryan et al. cited by the Examiner, which produces a synthesized 3-D facial image by computer processing analysis of a 3-D facial model and a decoding method which maps texture ("eignenface decomposition") and which does not apply or use, in any manner, a graphical or spatial arrangement of markings subject to visual comparison, per the applicant's Invention (see Abstract, and column 4, lines 62-65 and Fig. 7).

The remaining claims of the application are dependent on one of the foregoing claims 1, 24 and 38 and, therefore, are considered to patentably distinguish over the cited references, and be in form for allowance, for the same reasons stated above with respect to the independent claims.

#### CONCLUSIONS

For all the foregoing reasons, applicant respectfully submits that the amended claims submitted herewith patentably distinguish over the cited references and are in form for allowance. In the event that the Examiner cannot allow the present application for any reason, the Examiner is encouraged to contact Applicant's attorney to discuss resolution of any remaining issue.

Respectfully Submitted, MERRY. Trevor et al.

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